Notes from Energy and Climate Working Group Meeting

Madison, Wisconsin July 19, 2012

In attendance:

Last Name; Organization

Barrett, Melony; Illinois State Geological Survey
Benedict, Karl; Unversity of New Mexico
Curl, Doug; Kentucky Geological Society

Eckman, Richard; NASA HQ

Faeth, Paul; CNA Corp

Hardin, Danny; University of Alabama - Huntsville

Hosking, Richard; University of Auckland Hutchinson, Chuck; University of Arizona

Keiser, Ken; University of Alabama - Huntsville Maskey, Manil; University of Alabama - Huntsville

Meyer, Carol; ESIP

Privette, Ana P; NOAA NCDC/NCCICS/NCA

Kumar, Shailendra; Private Consultant Sproles, Eric; ORISE/EPA Tilmes, Curt; NASA and USGCRP

Vaughn, Cathy; IRI, Columbia University

Wee, Brian; NEON, Inc.

Zednick, Stephan; RPI

Virtual participation: Tabor Allison – AWWI Laurie Allen – USGS

Mellissa Terinsky – Northrup Grumman

- Energy and Climate is now an official working group
- At the winter 2012 meeting the group identified the need for a tool that provides information and links regarding renewable energy
 - As a result a white paper was published "need website"!

The tool will focus on renewable, primarily solar, wind, and geothermal.

The tool will have the following characteristics:

- Transparency
- Quality control
- Address the needs of key stakeholders
- Interoperability
- Open Source
- Potentially harness mobile and social networking platforms
- Based upon the Drupal framework

A student intern has been hired to develop the prototype tool and will start in August 2013.

The timeline of the tool:

Phase 1 - January 2013 – a prototype tool will be developed and showcased at the winter meeting for agencies.

Phase 2 – Use the prototype tool to help raise funding for a fully functional tool.

What the tool will accomplish

Tabor::

- One of the first DST products was a landscape assessment tool that could be used by wind developers to identify potential wildlife concerns.
- AWWI would like a tool that project developers will use to help avoid impacting wildlife.
- The idea of the project is to provide a database or taxonomy of available tools.
- There is a confluence of interest to help a variety of groups reach common goals.

Laurie Allen:

- It is extremely difficult to develop one single tool that accomplishes all goals.
- This approach provides a compendium of tools.
- Tools can be broadly defined.
- Working AWWI to develop a tool is important as it provides agencies a product to get behind.
- USFW has a new set f guidelines where wind should or should not be developed.
- One of the key points is to include the ability to identify:
 - O What assumptions and drivers went into the model?
 - O What is the quality of the data?
- A challenge is providing how much data is needed.
- While it is easy to create tools, it is important to create tools that provide enough information to enable decision making.

Kumar:

- ESIP Testbed is trying to provide a resource to try out new approaches and tools.
- The portal should provide the ability for people to assess and leave comments.

Christine from ESRI:

her experience using the ESIP Test Bed has been positive.

Karl Benedict:

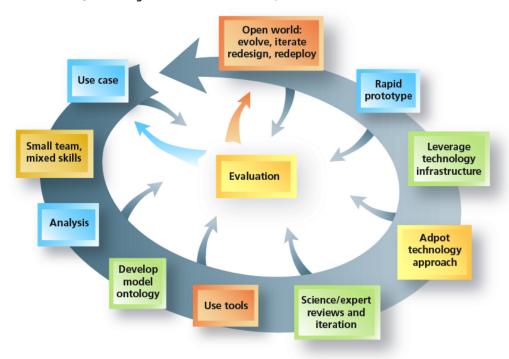
- The underlying data model should identify what information needs to be captured?
- Are the available ontologies sufficient? Or do they need to be developed?
- The information flow will be initially slow, and will increase.

Stephan Zedlick:

- The approach will constantly evaluate new ontologies and semantic web technology
- Based upon a rapid prototype, that has a lot of iterations
- You build the first tool based upon user's concepts, and then refine the needs through later iterations.

Semantic Web Methodology & Technology Development Process

- Establish and improve a well-defined methodology vision for semantic technology based on application development
- Leverage controlled vocabularies, etc.



Kumar:

- It is important to create features that stakeholders will find useful.

Ken Keiser:

- there have been other products developed on Drupal.
- Survey the user base to get a common database of tools.

Stephan:

requests a list of tools that users would like to see implemented.

Karl

- It is important to set definable goals that includes use cases.
- While all goals may not be able to be addressed in 6 months they can be incorporated as the project continues to develop.
- Should this start on the ESIP commons?
- The test bed might be a better place to start, but should move on quickly.

Laurie, Bechtel, and tabor will work together to coordinate use cases.

End Summary on DST:

The plan that emerged from the discussions at ESIP last week is to have Eric Sproles (ESIP Student Fellow) take the lead on developing the user requirements (with guidance from Taber Allison from AWWI, and Alvaro Graves, RPI (Student Intern) to develop an end-to-end architecture and then begin the implementation/development.

Both Eric and Alvaro will develop a use case with guidance from Taber Allison (AWWI), Laurie Allen (USGS) and Robert Bectel (DOE).